

WHAT IS CLAIMED IS:

1. A process for producing a halogenated aromatic amine compound, comprising allowing an aromatic amine compound represented by the following
5 Formula (1):



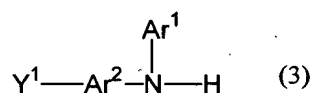
- wherein Ar^1 represents a substituted or unsubstituted monovalent aromatic hydrocarbon ring group or a substituted or unsubstituted monovalent aromatic
10 heterocyclic ring group;

to react with a dihalogenated aromatic compound represented by the following Formula (2):



- wherein Ar^2 represents a substituted or unsubstituted
15 divalent aromatic hydrocarbon ring group or a substituted or unsubstituted divalent aromatic heterocyclic ring group, and Y^1 and Y^2 each independently represent an iodine atom, a bromine atom or a chlorine atom;

- 20 in the presence of a metallic catalyst and a basic compound in a non-reactive solvent to obtain a halogenated aromatic amine compound represented by the following Formula (3):

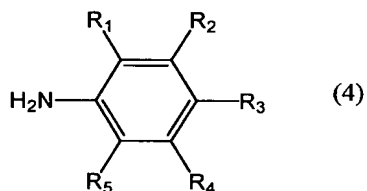


- 25 wherein Ar^1 , Ar^2 and Y^1 are as defined above;

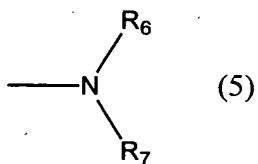
the metallic catalyst being a catalyst having a

phosphorus-containing ligand having at least one cyclic hydrocarbon group.

2. The process for producing a halogenated
5 aromatic amine compound according to claim 1, wherein said aromatic amine compound represented by Formula (1) is an aromatic amine compound represented by the following Formula (4):



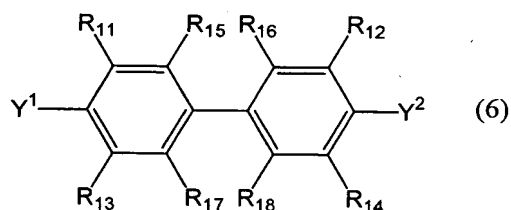
- 10 wherein R_1 to R_5 each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group having any of 1 to 8 carbon atoms, a substituted or unsubstituted alkoxy group having any of 1 to 8 carbon atoms, a substituted or unsubstituted aryl
15 group, a substituted or unsubstituted aryl ether group, a fluorine atom, an alkyl fluoride group having any of 1 to 8 carbon atoms, a substituted or unsubstituted aryl thioether group, a substituted or unsubstituted pyridyl group, or a group represented by the following
20 Formula (5):



wherein R_6 and R_7 each independently represent a

substituted or unsubstituted alkyl group or a substituted or unsubstituted aryl group.

3. The process for producing a halogenated aromatic amine compound according to claim 1, wherein said dihalogenated aromatic compound represented by Formula (2) is a dihalogenated aromatic compound represented by the following Formula (6):



wherein R_{11} to R_{18} each independently represent a hydrogen atom, a substituted or unsubstituted alkyl group having any of 1 to 8 carbon atoms, a substituted or unsubstituted alkoxy group having any of 1 to 8 carbon atoms, a substituted or unsubstituted aryl group, a substituted or unsubstituted aryl ether group, an alkyl fluoride group having any of 1 to 8 carbon atoms, a substituted or unsubstituted aryl thioether group or a substituted or unsubstituted pyridyl group; R_{15} and R_{16} , and R_{17} and R_{18} , may respectively independently combine through a carbon atom, a substituted or unsubstituted alkylene group, a substituted or unsubstituted alkylidene group, an oxygen atom, a nitrogen atom or a sulfur atom to form a condensed polycyclic structure or a heterocyclic

structure; and Y^1 and Y^2 each independently represent an iodine atom, a bromine atom or a chlorine atom.

4. The process for producing a halogenated
5 aromatic amine compound according to claim 1, wherein
said metallic catalyst is either of a palladium
complex and a nickel complex which have at least one
cyclic hydrocarbon group on a substituent on the
phosphorus.

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5. The process for producing a halogenated
aromatic amine compound according to claim 1, wherein
said cyclic hydrocarbon group is a substituted or
unsubstituted phenyl group, a substituted or
15 unsubstituted biphenyl group, a substituted or
unsubstituted naphthyl group or a substituted or
unsubstituted cyclopentadienyl group.

6. The process for producing a halogenated
20 aromatic amine compound according to claim 1, wherein
said metallic catalyst is a complex produced from a
palladium complex or a nickel complex and a
phosphorus-containing ligand having at least one
cyclic hydrocarbon group, inside the reaction system
25 during said reaction.

7. The process for producing a halogenated

aromatic amine compound according to claim 6, wherein said palladium complex or nickel complex is selected from the group consisting of $\text{Pd}(\text{OAc})_2$, $\text{Pd}(\text{Aca})_2$, $(\text{CH}_3\text{CN})_2\text{Pd}(\text{NO}_2)\text{Cl}$, $(\text{C}_{10}\text{H}_8\text{N}_2)_2\text{PdCl}_2$, $\text{Pd}_2(\text{dba})_3$, PdCl_2 ,
5 $\text{Ni}(\text{OAc})_2$, $\text{Ni}(\text{Aca})_2$, $(\text{CH}_3\text{CN})_2\text{Ni}(\text{NO}_2)\text{Cl}$, $(\text{C}_{10}\text{H}_8\text{N}_2)_2\text{NiCl}_2$, $\text{Ni}_2(\text{dba})_3$ and NiCl_2 .

8. The process for producing a halogenated aromatic amine compound according to claim 1, wherein
10 said basic compound is selected from the group consisting of an alkali metal alkoxide, an alkaline earth metal alkoxide, potassium carbonate and potassium tertiary phosphate.

15 9. The process for producing a halogenated aromatic amine compound according to claim 1, wherein said Y^1 and Y^2 in Formulas (2) and (3) are each a bromine atom.

20 10. The process for producing a halogenated aromatic amine compound according to claim 1, wherein the reaction is carried out at a temperature of from 50°C to 150°C .